

CALIFORNIA WILDLIFE HABITAT RELATIONSHIPS SYSTEM
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R070 Western Lyre Snake *Trimorphodon biscutatus*
Family: Colubridae Order: Squamata Class: Reptilia

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DISTRIBUTION, ABUNDANCE, AND SEASONALITY

The Lyre snake is found on rocky slopes, in canyons, on mesas and in boulder piles up to elevations of 910 m (3000 ft). It is restricted to the mountains and canyons of coastal southern California, to scattered desert mountain ranges, and along the southeastern border of the state in less mountainous areas, where it seems more tolerant of desert flats and plains. It is a secretive animal and may have a wider and more extensive range in the desert than is presently known (Klauber 1940, Stebbins 1954). Because it occurs in mostly rocky areas and is secretive, little information is available on abundance. It is never found in great numbers (Stebbins 1954).

SPECIFIC HABITAT REQUIREMENTS

Feeding: Lyre snakes forage in rocky areas on small vertebrates also living among the rocks. They eat bats, small rodents, lizards (*Uta stansburiana* and *Xantusia henshawi*) and probably ground-nesting birds (Cowles and Bogert 1935, Klauber 1940, Stager 1942, Krutzsch 1944). These snakes are venomous but presumably not dangerous to man. The venom is hemolytic, attacking the red blood cells of the prey, reducing its ability to take oxygen to tissues. Envenomation is by a pair of grooved teeth in the back of the mouth and a pair of venom glands. The prey must be grasped in the mouth and chewed to get the venom into the body (Stebbins 1954).

Cover: This snake prefers rocky cover. It can be found under granite flakes and slabs but seems to prefer more secure cover. The widely used practice of prying up granite flakes by amateur and professional collectors for the pet industry has destroyed a great deal of habitat and represents a threat to this species (Stebbins 1954).

Reproduction: Eggs are probably laid deep under rock cover, and thus extensive rock cover may be a requirement, but there are no data.

Water: Permanent water probably is not required.

Pattern: This species inhabits hilly, mountainous and canyon areas dominated by rocks. It is rarely found very far from rocky areas, except in the eastern part of the state where it is a little more tolerant of desert flats (Stebbins 1954).

SPECIES LIFE HISTORY

Activity Patterns: This species is nocturnal, foraging at night and occasionally in the early morning (Stebbins 1954). It has been observed active every month of the year but November, with a peak of activity in April and May (Klauber 1940, Stebbins 1954). Snakes in the warmer southern part of the state will probably be active longer and earlier in the season

than in the north.

Seasonal Movements/Migration: None.

Home Range: No data. This species probably stays fairly close to rocky areas.

Territory: No data.

Reproduction: Lyre snakes lay eggs. One clutch was laid in the lab in September and required 79 days to incubate (Stebbins 1954). A brood was found recently hatched on October 1 (Cowles and Bogert 1935).

Niche: Lyre snakes are probably eaten by kingsnakes and other ophiophagous snakes, avian predators (roadrunners and perhaps owls) and mammalian predators. Nothing is known about disease, competition, or parasites. The Lyre snake may be an important predator on crevice-nesting bats (Krutzsch 1944).

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